

2



Lesson Preparation book

ICT

Prep 2



First Term

2025 - 2026

Teacher' s Biography

Name:

School:

The educational administration:

Qualification:

Teaching Subject:

Comprehensive School:

The school to which he is delegated:

Date of appointment:

The job is on the staff:

Teacher Code:

Mobile Number:

Teacher

Supervisor

School Principal

Daily class schedule

Session Day	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eightieth	Ninth
Saturday									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									

session Day	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eightieth	Ninth
Saturday									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									

Teacher

Supervisor

School Principal

The Lesson Objectives of Computer

At the end of the first term the student will be able to:

- **Developing** students' awareness of the concepts of interconnected smart systems (Internet of Things, Artificial Intelligence, Robotics) and their role in addressing environmental challenges.
- **Providing** students with the ability to think creatively and innovate in using technology to protect the environment and reduce the effects of climate change.
- **Developing** students' knowledge of advanced cyber threats and ways to prevent them.
- **Training** students to develop practical plans to confront various cyber attacks (such as denial of service attacks).
- **Providing** students with comprehensive knowledge about the characteristics, sources, and types of big data.
- **Enhancing** students' capabilities in analyzing big data and using it in artificial intelligence applications.
- **Develop** students' knowledge of web design concepts and the importance of User Experience(UX) and User Interface(UI).
- **Providing** students with practical skills in applyingUX–UI principles and formatting web pages usingCSS.
- **Preparing** students to produce integrated digital projects usingHTML andCSS.
- **Developing** students' skills in designing and developing interactive websites using artificial intelligence tools and basic programming techniques

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Specific objectives of the subject of Computer Science and Information and Communication Technology

At the end of the first term the student will be able to:

- **Explains** the concept of interconnected smart systems (Internet of Things, Artificial Intelligence, and Robotics).
- **Infers** the impact of interconnected smart systems in addressing environmental problems (air pollution, drought, etc.).
- **Suggests** as many ideas as possible for employing smart systems to help protect the environment and reduce the effects of climate change.
- **Explains** advanced fraudulent threats.
- **Lists** as many ideas as possible to confront advanced cyber threats.
- **Proposes** a plan to counter Distributed Denial-of-Service (DDoS) attacks.
- **Explains** the characteristics of Big Data.
- **Discusses** the sources of Big Data.
- **Infers** the types of Big Data.
- **Discusses** the stages of Big Data processing.
- **Explains** the uses of Big Data.
- **Lists** as many examples as possible of Artificial Intelligence applications that rely on Big Data.
- **Explain** some concepts related to website design.
- **Suggest** multiple ideas for websites with UX–UI design.
- **Apply** basic UX–UI principles in simple classroom activities.
- **Discuss** web page styling using CSS.
- **Write** the basic structure of CSS correctly.
- **List** the benefits of CSS.
- **Explain** the idea of their digital project using HTML.
- **Write** the project codes correctly.
- **Design** a “MySchool” web page in an attractive way.
- **Design** a web page on the Internet.
- **Practice** the steps of creating simple websites using a free AI tool.
- **Develop** a web page on the Internet.

Teacher

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Distribution of computer and information technology content
For 2nd.Prep 2025 / 2026 - First Term

MONTH	week	DATE	TOPIC	Assessments and tests
September 2025	1	20 / 9 / 2025	Unit One Lesson ١: Smart systems and their impact on climate change	بداية الفصل الدراسي الأول
	2	27 / 9 / 2025		
October 2025	3	4 / 10 / 2025	Lesson ٢: Advanced Cyber Threats	
	4	11 / 10 / 2025		
	5	18 / 10 / 2025	Lesson ٣: Big Data	
	6	25 / 10 / 2025	Lesson ٤: Big Data and its Relationship to Artificial Intelligence	وفقاً لقرار ١٣٧ يتم عمل: اختبار أسبوعي واختبار شهري ١
November 2025	7	4 / 10 / 2025		
	8	8 / 11 / 2025	Unit Two Lesson ١: Principles of designing attractive, professional website interfaces	
	9	15 / 11 / 2025		
	10	22 / 11 / 2025	Lesson ٢: Formatting Web Pages	وفقاً لقرار ١٣٧ يتم عمل: اختبار أسبوعي واختبار شهري ٢
	11	29 / 11 / 2025		
December 2025	12	6 / 12 / 2025	Lesson ٣: My Digital Project for My School	
	13	13 / 12 / 2025		
	14	20 / 12 / 2025	Lesson ٤: Creating a Website with the Help of Artificial Intelligence	
	15	27 / 12 / 2025		
January 2026	16	3 / 1 / 2026	General review First semester exams begin	
	17	10 / 1 / 2026		

Teacher

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Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	One	Intelligent Systems and Their Impact on Climate Change

Introduction / What are intelligent connected systems? How can they contribute to protecting our planet?

Lesson objectives/

- 1- Explain the concept of intelligent interconnected systems.
- 2- Suggest as many ideas as possible for employing intelligent systems to help protect the environment
- 3- Conclude the impact of intelligent interconnected systems on facing environmental problems

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to be: Environmental Awareness Work values: cooperation Globalization Issues : Participation in Environmental Protection	Electronic board – textbook- Educational video		☐ Dialogue and discussion ☐ Problem solving		Suggest ideas through which intelligent interconnected systems can be used to help address environmental problems	Searching the Internet How can a smart system conserve water	They are devices that can perform work like human
Weekly Assessment		Complete: The main function of artificial intelligence is					

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	One	Con. Intelligent Systems and Their Impact on Climate Change

Introduction / What are intelligent connected systems? How can they contribute to protecting our planet?

Lesson objectives/

- 1- Explain the concept of intelligent interconnected systems.
- 2- Suggest as many ideas as possible for employing intelligent systems to help protect the environment
- 3- Conclude the impact of intelligent interconnected systems on facing environmental problems

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to be: Environmental Awareness Work values: cooperation Globalization Issues : Participation in Environmental Protection	Electronic board – textbook- Educational video		☐ Dialogue and discussion ☐ Problem solving	•	Suggest ideas for how interconnected smart systems can be used to help address environmental problems. By researching online, how a smart system can reduce pollution. It is possible through “smart systems” to.....		
Weekly Assessment			Complete: The Earth is facing major problems today because of.....				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Two	Advanced Cyber Threats

Introduction / What do you know about the concept of social engineering in the online world?

Lesson objectives/

- 1- Explain advanced fraudulent threats 2- Mention several ideas for countering advanced cyber threats
3- Propose a plan to counter distributed denial-of-service attacks

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Protecting Your Personal Data Work Values: Accuracy Citizenship Issues: Protecting devices and networks in my environment	Electronic board – textbook– Educational video – Flashcards with examples of phishing		☐ Dialogue and discussion ☐ Problem solving ☐ brainstorming		Suggest ideas to protect your device from ransomware.	By researching online, learn how ransomware works.	 is a type of malicious software that encrypts your files.
Weekly Assessment		Complete: sophisticated techniques used by hackers to harm us or steal our information.					

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Two	Con. Advanced Cyber Threats

Introduction / What do you know about the concept of social engineering in the online world?

Lesson objectives/

- 1- Explain advanced fraudulent threats 2- Mention several ideas for countering advanced cyber threats
3- Propose a plan to counter distributed denial-of-service attacks

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Protecting Your Personal Data Work Values: Accuracy Citizenship Issues: Protecting devices and networks in my environment	Electronic board – textbook – Educational video – Flashcards with examples of phishing		☐ Dialogue and discussion ☐ Problem solving ☐ corporative learning	•	Suggest ideas to protect your device from cyber threats.	Name advanced social-engineering techniques.	is the art of deceiving people to make them reveal confidential information or perform actions that jeopardize their security.
Weekly Assessment			Put ✓ or x: Ransomware can permanently damage your device ()				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Three	Big Data

Introduction / What is big data? How can we securely obtain data that helps us make proper decisions?

Lesson objectives/

- 1- Explain the characteristics of big data 2- Discuss secure big datasources 3- Infer the types of big data

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Appreciating the importance of information Work Values: Cooperation Globalization Issues: Exchange of Big Data among countries worldwide	Interactive board – Textbook – Flashcards for some types of Big Data		☐ Dialogue and discussion ☐ Mind map ☐ brainstorming		Using a text editor, write some characteristics of Big Data.	Draw a mind map to illustrate the types of Big Data.	 are structured data organized in tables with rows and columns, such as traditional
Weekly Assessment			Put ✓ or x: Semi-structured data is a mixture of structured and unstructured data ()				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Four	Big Data and Its Relationship to Artificial Intelligence

Introduction / What is big data? How can we securely obtain data that helps us make proper decisions?

Lesson objectives/

1- Explain the characteristics of big data 2- Discuss secure big data sources 3- Infer the types of big data

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work Values: Innovation Globalization Issues: Data analysis using Artificial Intelligence	Interactive board – Textbook – Flashcards for some types of Big Data		☐ Dialogue and discussion ☐ Mind map ☐ brainstorming		Using a text editor, write some uses of Big Data.	Draw a mind map to illustrate the stages of Big Data processing.	 is considered the first stage of data processing.
Weekly Assessment			Put ✓ or x: Big Data is not the raw material that Artificial Intelligence feeds on ()				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Four	Con. Big Data and Its Relationship to Artificial Intelligence

Introduction / How does artificial intelligence rely on big data?

Lesson objectives /

- 1- Discuss the stages of big data processing
- 2- Explain the using of big data
- 3- Cite as many examples as possible of how artificial intelligence relies on big data

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work Values: Innovation Globalization Issues: Data analysis using Artificial Intelligence	Interactive board – Textbook – Flashcards for some types of Big Data		☐ Dialogue and discussion ☐ Mind map ☐ brainstorming		Using a text editor, write some uses of Big Data.	State the role of data in Artificial Intelligence.	The role of Big Data in Artificial Intelligence is
Weekly Assessment			Put ✓ or x: Big Data is not the raw material that Artificial Intelligence feeds on ()				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Unit2 I.1	Principles of Designing Attractive, Professional Website interface

Introduction / By browsing websites, what are the most important things that make it easier for you to use this website?

Lesson objectives /

- 1- Explain some concepts related to website design
- 2- List as many ideas as possible for websites with good UX/UI design
- 3- Employ some basic UX/UI principles in simple classroom activities

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Developing digital aesthetic taste Work Values: Perfection / Mastery Globalization Issues: The spread of applications that rely on professional interface design	Interactive board – Textbook – Presentation – Flashcards for application interfaces		☐ Dialogue and discussion ☐ brainstorming	----- -----	Discuss some flashcards of application interface types.	State some principles of good user interface design.	 is thinking about how people will use the application or website.
Weekly Assessment			Complete: User Interface (UI) design is mainly concerned with the of the product.				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Unit2 L.1	Con. Principles of Designing Attractive, Professional Website interface

Introduction / By browsing websites, what are the most important things that make it easier for you to use this website?

Lesson objectives /

- 1- Explain some concepts related to website design
- 2- List as many ideas as possible for websites with good UX/UI design
- 3- Employ some basic UX/UI principles in simple classroom activities

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Developing digital aesthetic taste Work Values: Perfection / Mastery Globalization Issues: The spread of applications that rely on professional interface design	Interactive board – Textbook – Presentation – Flashcards for application interfaces		☐ Dialogue and discussion ☐ corporate learning	• -----	Draw a conceptual design of an organized application interface.	Discuss the principle of successful design.	The website/app is simple and easy to use; you can quickly find what you need.
Weekly Assessment			Complete: User Interface (UI) design is mainly concerned with the of the product.				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Two	Web page format

Introduction / What is CSS? Explain.

Lesson objectives /

- 1- Discuss web page layout (CSS). 2- Write the basic structure of CSS correctly 3- List the benefits of the CSS language

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Developing digital aesthetic taste Self - Values: Perfection / Mastery Globalization Issues: The adoption of CSS as a global standard for web page styling	Interactive board – Textbook – Presentation		☐ Dialogue and discussion ☐ corporate learning ☐ practical training		Write / State Some Benefits of CSS	By using PowerPoint Write / State Some Benefits of CSS	CSS is used to the appearance of web pages.
Weekly Assessment		Complete: One of the benefits of CSS is.....					

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Two	Con. Web page format

Introduction / What are the ways to apply CSS styles?

Lesson objectives /

1- Discuss web page layout (CSS). 2- Write the basic structure of CSS correctly 3- List the benefits of the CSS language

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Developing digital aesthetic taste Self-Values: Perfection / Mastery Globalization Issues: The adoption of CSS as a global standard for web page styling	Interactive board – Textbook – Presentation		☐ Dialogue and discussion ☐ corporate learning ☐ practical training		Write / State Some Benefits of CSS	By using PowerPoint Write / State Some Benefits of CSS	CSS is used to the appearance of web pages.
Weekly Assessment		Complete: One of the benefits of CSS is.....					

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Three	My Digital Project for My School

Introduction / How can you design an attractive website?

Lesson objectives /

1-Explain the concept of my digital project using HTML

2- Write my project code correctly

3- Design my school's page in an attractive way

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Applying the steps to create a project Work Values: Cooperation Globalization Issues: Using modern digital technologies in project implementation	Interactive board – Textbook – Presentation		☐ Dialogue and discussion ☐ corporate learning	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----	Write the CSS Code for the Lesson	Changing the color of a heading	A CSS file can be used to style a large number of HTML pages at once
Weekly Assessment			Complete: ----- refers to the code inside a CSS file used to style the container and its contents.				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Three	Con. My Digital Project for My School

Introduction / How can you design an attractive website?

Lesson objectives /

1-Explain the concept of my digital project using HTML

2- Write my project code correctly

3- Design my school's page in an attractive way

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Applying the steps to create a project Work Values: Cooperation Globalization Issues: Using modern digital technologies in project implementation	Interactive board – Textbook – Presentation		☐ Dialogue and discussion ☐ corporative learning ☐ practical training	•	Write the “My School” Project Code	Identify a main component of the project page.	 is the part that controls the appearance of the entire page.
Weekly Assessment		Complete: ----- refers to the code inside a CSS file used to style the container and its contents.					

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 2				First	Four	Create your website with the help of Artificial Intelligence

Introduction / How can you create a website? What is the role of artificial intelligence in this?

Lesson objectives /

1- Design my website

2- Practice the steps of creating simple websites using a free artificial intelligence tool

3- Develop my website

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Applying the Steps of Project Creation Work Values: Cooperation Globalization Issues: Using modern digital technologies in project implementation	Interactive board – Textbook – Presentation		☐ Dialogue and discussion ☐ learning ☐ practical training	<			

Teacher's Signature

